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PROPOSED DECISION

Agenda ID #12177 (Rev. 1)

Ratesetting

7/11/2013

Item 10

Decision **PROPOSED DECISION OF ALJ HYMES** (Mailed 6/11/2013)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric
Company (U902M) for Approval of
Demand Response Program
Augmentations and Associated Funding
for the Years 2013 through 2014.

Application 12-12-016
(Filed December 21, 2012)

And Related Matter.

Application 12-12-017

**DECISION ADDRESSING COMMISSION STAFF REPORT ON
2012 DEMAND RESPONSE PROGRAM RESULTS**

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**DECISION ADDRESSING COMMISSION STAFF REPORT ON
2012 DEMAND RESPONSE PROGRAM RESULTS****1. Summary**

This decision approves certain Commission Staff recommendations regarding programmatic or operational revisions to San Diego Gas & Electric Company and Southern California Edison Company 2013-2014 Demand Response programs; and directs the two utilities to implement the recommendations as described herein.

This proceeding is closed.

2. Background

In Decision (D.) 13-04-017, the Commission approved revisions to the 2013 and 2014 Demand Response programs for San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (SCE) in order to mitigate impacts of the ongoing outage of the San Onofre Nuclear Generating Station (SONGS). The Commission also directed Commission Staff (or Staff) to continue to review 2012 Demand Response program results and develop a report on any additional program revisions Staff may recommend as a result of the review and lessons learned from 2012.

On April 30, 2013, Commission Staff requested and received from the assigned Administrative Law Judge (ALJ) a one-day extension to file its report. On May 1, 2013, Commission Staff submitted its report and served it to the parties of record in this proceeding. Pursuant to D.13-04-017, parties were given an opportunity to comment on the report. On May 15, 2013, SDG&E, SCE, and the Division of Ratepayer Advocates (DRA) filed comments to the report.

On May 17, 2013, the ALJ issued a Ruling identifying, marking and admitting into the record of this proceeding, the Commission Staff Report on “Lessons Learned from Summer 2012 Southern California Utilities’ Demand Response Program” (May Report).

3. Issues to be Addressed

As was the case in D.13-04-017, the issues to be addressed in this decision are whether the Demand Response program revisions recommended by Staff: 1) improve the usefulness or availability of Southern California Utilities’ Demand Response programs for 2013 and/or 2014; 2) comply with one or more of the guiding principles of the Energy Division’s November 2012 Letter; and 3) rely on lessons learned from the 2012 Demand Response program results.

4. Overview of Staff Report

The purpose of the May Report is to provide lessons learned from the SCE and SDG&E 2012 Demand Response programs and to recommend programmatic or operational revisions.¹ In the May Report, Commission Staff makes several overarching and programmatic conclusions about the SCE and SDG&E Demand Response programs.

Commission Staff concludes that on average, the 2012 ex-post results for all Demand Response program events diverge from the 2012 daily forecast by a considerable degree. The divergence can be traced to a variety of causes, such as inadequate forecasting methods, program design flaws, and non-performance by program participants and/or operations. Staff also concludes that comparing ex-post results with the 2012 Resource Adequacy forecast is not a good indicator

¹ May Report, Executive Summary at 1.

of how well a Demand Response program is performing. In addition, Staff finds that, in 2012, both SCE and SDG&E used their Demand Response programs far below the program's limits. Yet, during the same time period, the two utilities dispatched their peaker power plants far more frequently in comparison to 2006-2011 historical averages. Lastly, Commission Staff confirms that Demand Response programs are not designed to effectively mitigate price spikes in the California Independent System Operator's (CAISO) energy market.

In the May Report, Staff also made findings about specific Demand Response programs. In the case of SCE's programs, Staff finds that SCE's forecasting methodology for its Air Conditioning (AC) Cycling program does not effectively predict program load reductions. Furthermore, SCE's dispatch strategy for the AC Cycling program reduces program effectiveness during critical hot weather days. In the case of both SCE and SDG&E's Demand Response programs, Staff finds that the Peak Time Rebate (PTR) program results indicate that customers receiving notification of events have higher awareness of the program in comparison to those who do not receive event notifications. Furthermore, these same customers provide a more significantly reduced load during events. Staff expresses concern that the PTR program experiences a large percentage of customers who receive incentives without significantly reducing load (free ridership.) In the case of SDG&E's Demand Bidding Program, Staff concludes that the Commission's decision to modify the program to a 30-minute trigger limits the US Navy's ability to participate in this program. For both utilities, Commission Staff determines that there is a lack of data to evaluate the effectiveness and value of the Flex Alert Campaign. Finally, Staff considers the Daily and Weekly Demand Response reports useful to the CAISO and the Commission for monitoring Demand Response resources.

In order to address these findings, Staff recommends the following programmatic or operational revisions to the Demand Response programs:

1. Evaluate Demand Response program operations in comparison to the operation of peaker plants;
2. Review and improve daily forecasting methods for all Demand Response programs, but in particular:
 - (a) SCE's forecasting methods for its AC Cycling program; and
 - (b) SDG&E's forecasting methods for its AC Cycling and Capacity Bidding programs.
3. Require SCE to communicate, through outreach and marketing efforts, the new features of its commercial AC Cycling program;
4. Explore the load impacts of Automatic Demand Response (Auto DR or ADR);
5. Require SDG&E to work collaboratively with the Navy to design a program to meet the unique needs of the Navy;
6. Revise PTR from a default program to an optional program;
7. Require SCE to modify either the dispatch strategy or the incentive structure of its AC Cycling program to more appropriately compensate customers willing to tolerate longer events; and
8. Continue daily and weekly Demand Response reports to the CAISO and the Commission.

5. Parties' Positions Regarding the May Report

Three parties provided comments in response to the May Report: SDG&E, SCE, and DRA. The following is a brief overview of each set of comments. Specific comments will be addressed in the Discussion section of this decision.

SDG&E considers the May Report an “excellent foundation to begin a dialogue” for improving Demand Response program forecasts.² SCE cautions that the Commission should avoid establishing overly prescriptive forecasting requirements. While SDG&E supports the May Report recommendations to address the loading order policy for Demand Response planning purposes, it also warns against drawing premature conclusions. Regarding specific programmatic recommendations, SDG&E supports the Staff recommendations regarding a Demand Bidding Program for the Navy and pursuing the use of enabling technologies to improve Demand Response programs.

SCE contends that the May Report raises issues that are “part of a larger context of the evolution of [Demand Response]” but that are not appropriate in a ratesetting application.³ SCE recommends that the Commission close this proceeding (presumably without further action.) SCE notes that it “will consider” Staff recommendations in its future [Demand Response] program planning. However, SCE provides comments on the subjects of megawatt (MW) forecasts, program design and program dispatch.

DRA asserts that the May report confirms many Demand Response shortcomings that DRA has previously identified. DRA considers the

² SDG&E Comments at I.

³ SCE Comments at 2.

May Report useful in providing specific recommendations to improve Demand Response program design. DRA recommends that the Commission open a new rulemaking to address Demand Response program performance versus forecast; variance between the daily forecasts and ex-post results when evaluating program cost-effectiveness; the reality of maximum available number of hours or events; the extent of free-ridership in certain Demand Response programs; and to identify the requirements for 2015-2017 Demand Response Program applications.⁴

6. Discussion

In the May Report, Commission Staff lists eight main recommendations for revising the SCE and SDG&E Demand Response programs, as well as some related recommendations. Below, we address the recommendations and related party comments.

6.1. Comparing Program Operations to Peaker Plant Operations

Commission Staff recommends that the Commission study and compare the frequency that SDG&E and SCE use their peaker power plants and Demand Response programs to ensure that the utilities are more appropriately relying on Demand Response programs, as required by the State Loading Order.⁵ We find insufficient evidence in the record of this proceeding to review the use of peaker

⁴ DRA Comments at 3-4.

⁵ The Loading Order is the deployment delineation of energy resources to meet California's energy needs. In the *Energy Action Plan*, adopted by the Commission in 2003, energy efficiency and demand response programs are ranked at the top of the loading order and peaker plants at the bottom. See http://www.energy.ca.gov/energy_action_plan/

power plants in comparison with Demand Response programs. We will consider this issue in a new Demand Response rulemaking.

In reviewing 2006 to 2011 Demand Response program data, Staff finds that neither SDG&E nor SCE triggered the programs often enough to come close to the maximum number of events or hours allowed by the program. In 2012, the number of Demand Response events and hours remained relatively stable compared to the historical averages. However, the number of times SCE and SDG&E dispatched their peaker plants during 2012 increased three to four times the historical average. Staff concludes that the peaker plant service hours were closer to their usage limits than the Demand Response programs. Staff contends that the utilities' reliance on peaker plants instead of Demand Response programs violates the State Loading Order.

After reviewing historical Demand Response program data and peaker plant utilization, Staff recommends that the Commission require the utilities to: 1) Provide Demand Response event and peaker plant data in all future Demand Response filings, and 2) Reflect Demand Response historical operations in the input assumptions for Ex Ante forecast and cost-effectiveness analyses. Staff also recommends that the Commission further address the Loading Order policy, in terms of Demand Response and the operation and utilization of peaker plants, in the proposed Demand Response Rulemaking as well as the utilities' energy cost recovery proceeding.

Both SDG&E and DRA support these recommendations.⁶ However SDG&E cautions against making premature conclusions, noting the complexity associated with decisions to dispatch peaker plants or call a Demand Response event. SDG&E recommends further analysis to fully understand the various resource deployment strategies used in 2012.⁷

SCE contends that comparing peaker plant usage to the dispatch of Demand Response resources is out of scope of this proceeding. SCE further argues that while the Loading Order is an element of the Long Term Procurement Planning process used to structure a utility's portfolio, it is "not a rule governing day-to-day dispatch."⁸ Instead, SCE states that, pursuant to Commission policy, it follows the Commission's least-cost dispatch standard.

In determining whether or not to approve the staff recommendation, we disagree with SCE that the comparison of peaker Plant usage to the utilization of Demand Response programs is not in the scope of this proceeding. The scope of this proceeding includes improving the use and reliability of Demand Response programs for 2013 and 2014. As part of improving Demand Response programs, the Commission should know the extent to which Demand Response programs are being used in comparison to peaker plants and why. However, while we are concerned with this issue, we find that there is insufficient evidence in the record of this proceeding to determine an outcome. We will consider the issue of peaker

⁶ See SDG&E Comments to the May Report at II and DRA Comments to the May Report at 14.

⁷ SDG&E Comments at II.

⁸ SCE Comments to the May Report at 13.

power plant usage versus Demand Response program usage in a new Demand Response Rulemaking.

6.2. Improving Daily Forecasting for Demand Response Programs

In order for day-ahead forecasting to be valid and useful for system planners, Staff concludes that the daily forecast must be more consistent with the ex-post results. Staff recommends that the daily forecasting methods for all programs undergo meaningful and immediate improvements so that the day-ahead forecasting is a more effective and reliable tool for grid operators.⁹ Staff also recommends specific improvements for SDG&E's AC Cycling,¹⁰ PTR and Capacity Bidding programs, and for SCE's AC Cycling program.¹¹

6.2.1. Improving Daily Forecasting for All Demand Response Programs

We find that transparent, consistent, and accurate daily forecasting is necessary to successful Demand Response programs. We direct the Demand Response Measurement and Evaluation Committee (DRMEC)¹² to work with the CAISO and Commission staff to develop improved forecasting methodologies beginning, on a limited basis, this summer.

⁹ May Report at 10.

¹⁰ SDG&E's AC Cycling program is also known as Summer Saver.

¹¹ SCE's AC Cycling program is also known as Summer Discount Plan.

¹² Previous Commission decisions created the DRMEC and authorized it to oversee the evaluation of statewide Demand Response activities. See D.06-11-049 and D.08-05-027. The DRMEC is composed of representatives from the Commission, the California Energy Commission, and a representative from each of the three utilities implementing Demand Response activities.

In their analysis, Staff compares event day forecasts¹³ to the ex-post load reduction estimates.¹⁴ Staff finds “on average, the ex-post results for all program events diverge from the daily forecast by a considerable degree.”¹⁵ Staff surmises that the differences could be explained by inadequate program design and program operations and limited transparency in the reporting methods or, in some cases, a lack of robust analysis.¹⁶ Staff recommends that overall, the daily forecasting methods for all programs be improved beginning with better documentation and transparency with relevant agencies and stakeholders.

Regarding the general issue of Demand Response forecasting, DRA states that daily forecasting requires improvement to provide reliable information to the CAISO. DRA suggests that stakeholder input is crucial to the creation of an effective forecasting methodology.¹⁷ SCE finds reasonable the idea of additional stakeholder input and notes that the DRMEC has already begun to engage the CAISO in its process.

¹³ Staff defines the daily forecast as the utilities’ daily estimate of hourly load impact from Demand Response programs during an event period. The purpose of the daily forecast is to provide the CAISO, Commission and the California Energy Commission (CEC) the hourly megawatts (MW) provided by the Demand Response programs on each event day.

¹⁴ Staff defines the ex-post results as the most accurate measurement of the load impact results from all of the Demand Response programs triggered in a year. The ex-post results are calculated using comprehensive regression models. The purpose of the ex-post results is to report to the Commission the actual results of the Demand Response program events.

¹⁵ May Report at 8.

¹⁶ *Id.* at 10.

¹⁷ DRA Comments at 6.

SDG&E considers the May Report an excellent foundation for improving current daily forecasting methods. However, SDG&E does not believe the “narrowly defined and highly prescriptive” Staff recommendations will improve the quality of forecasts.¹⁸ While SDG&E is open to working with all parties to make its forecasting methods more transparent, the utility considers forecasts with high level requirements developed through collaboration and discussion to be much more useful than overly prescriptive requirements. SDG&E points to the approach used in the load impact protocols as a successful and flexible model for developing a future forecasting methodology.

The Commission is concerned with the variance between the daily forecasts and the ex-post results for Demand Response programs, as described in the May Report. Successful Demand Response programs require transparent, consistent, and accurate daily forecasting. However, as SDG&E points out in its comments, the daily forecasting reports were developed with no prior standards or processes.¹⁹ Thus, we should not hastily revise them for 2013. Instead, we should, as recommended by Staff, DRA, and SCE, include thoughtful stakeholder input.

We find that the idea of stakeholders assisting in the revision of daily forecasting methodology meets the requirements of this proceeding in that:

- 1) it will improve the usefulness or availability of Demand Response for 2013 and/or 2014;
- 2) it complies with the guiding principle of increasing

¹⁸ SDG&E Comments at I.

¹⁹ SCE comments at 3.

program reliability; and 3) it relies on lessons learned from the 2012 Demand Response program results, as discussed above.

We direct the DRMEC to meet within 15 days from the issuance of this decision with the CAISO and Commission Staff to begin to address the issues discussed in the May Report. In comments, the CAISO noted that consideration of historical program performance in forecasting methodology could lead to benchmarking and continual improvement of demand response programs.²⁰ As recommended by the CAISO, the DRMEC should include as part of its review, an evaluation of how the actual historical operation of demand response programs impacts the input assumptions for ex-ante forecasts. The group should develop revised daily forecasting methodologies to be piloted during the summer of 2013 and launched no later than September 1, 2013. Given that the 2013 Summer season has begun and for reasons discussed in the following section, the group should focus its work on two programs during 2013: AC Cycling and Peak Time Rebate. We provide flexibility to the group to determine if piloting one methodology for each of the programs is sufficient or if more is needed. The DRMEC shall submit a report by January 31, 2014 to the Commission and parties to this proceeding via a Tier One Advice Letter. The report shall detail the forecasting methodologies pursued, the results and recommendations for daily forecasting for 2014 and beyond.

²⁰ CAISO comments to the proposed decision, July 1, 2013 at 4.

6.2.2. Improving Daily Forecasting for Specific Demand Response Programs

In the May Report, Commission Staff also provides analysis and recommendations on the forecasting of specific utility Demand Response programs.

SCE programs performing poorly²¹ includes Critical Peak Pricing, Peak Time Rebate, Demand Response Contracts,²² Summer Discount Plan (AC Cycling), and Agricultural Pumping Interruptible.

SCE did not provide daily forecasts for August 2012 Residential PTR events, leaving only two events where Staff could compare daily forecasts with ex-post results. Given the lack of data, in addition to additional issues with PTR (as discussed in Section 6.6), we direct the DRMEC to include SCE's PTR program in its review of daily forecasting for Summer 2013.

Staff concludes that the SCE's AC Cycling program, the most triggered of its Demand Response programs,²³ represents the most variance of all the SCE Demand Response programs.²⁴ Staff surmises that there are three reasons for the variance: 1) customer segmented cycling resulting in a rebound effect;²⁵

²¹ Program events that were consistently below the forecast are considered to be poor performing programs. *See* May Report at 11 and Table 2.

²² Also known as Aggregator Managed Portfolio programs.

²³ The Summer Discount Plan was triggered 23 times, including two early test events.

²⁴ May Report at 18.

²⁵ SCE employed a segmented cycling for the Summer Discount Plan whereby all Summer Discount Plan customers were divided into three customer groups, each of which were only triggered for a portion of each event. The purpose of the strategy is to limit customer fatigue. The implementation of the strategy created a rebound effect such that the average hourly load impact was dampened. *See* May Report at 19 and Table 14.

2) customers exercising the override option;²⁶ and 3) the transition from an emergency program to a price-responsive program.²⁷

In addition to reviewing the results of SCE's AC Cycling program, Staff performed a review of SCE's forecasting method for AC Cycling and found that incomplete information regarding the methodology, especially the methodology for determining the equation coefficients, limits the ability to understand the forecasting methodology. Staff concluded that the program forecast method cannot be relied upon to effectively predict actual program load reductions. To improve the methodology in a meaningful fashion, Staff recommends that the Commission require SCE to immediately document the forecasting methods to be used for 2013 and vet the methods with the Commission and CAISO Staff as well as other stakeholders. In order to identify the most reliable method for 2014 and beyond, Staff recommends that SCE pilot more than one forecasting method during 2013. SCE states that it is not opposed to piloting more than one forecasting method for the AC Cycling program. However, SCE expresses concern regarding the ability to perform this pilot during the event season.²⁸

Because SCE's AC Cycling program represents the greatest variance of all its Demand Response programs, we target our discussion on this program. The Commission finds that the daily forecasting for SCE's AC Cycling program needs improvement. While we recognize that a pilot may be challenging to be implemented in time for the summer of 2013, given the size of SCE's AC Cycling program and its ability to deliver megawatts quickly, it is critical to use this

²⁶ *Id.* at 20.

²⁷ *Ibid.*

²⁸ SCE Comments at 8.

summer as an opportunity to pilot one or more forecasting methodologies for the program.. As we have previously determined, the DRMEC shall review daily forecasting methodologies for the SCE AC Cycling program, develop a pilot forecasting methodology and present the results of the pilot and any further recommendations in the December 1, 2013 report.

SDG&E programs performing poorly, as defined by the May Report, include Residential PTR and the emergency option of Critical Peak Pricing.²⁹ The residential PTR experienced differences of -91 percent to -73 percent between the daily forecast and ex-post load impacts.³⁰ Staff surmises that the accuracy could be improved if differences between the daily forecast and ex-post load impact models were eliminated.

In the case of its residential PTR program, Staff discovered that in the ex-post methodology, SDG&E only included those customers who signed up to receive event email or text alerts. This difference in modeling could lead to the variance between daily forecast and ex-post results. Staff recommended and SDG&E concurred that only opt-in customers should be included in the SDG&E residential PTR daily forecast. SDG&E stated that it has implemented this change.

Program results for Critical Peak Pricing indicate that ex-post results consistently outperformed the daily forecast predictions.³¹ Staff alludes to two reasons for the program performance: 1) a variation in load reduction per customer leading to a high variation in the aggregate impact estimates, and

²⁹ May Report at Table 3.

³⁰ *Id.* at 24.

³¹ *Id.* at 25.

2) a potential measurement error leading to differences between load impact category values. While Staff recommends requiring SDG&E to conduct a test event to improve daily forecast estimates for Critical Peak Pricing, Staff does not explain how or why this would create an improvement. We do not find enough evidence in the record to direct the additional test events.

Although not a program that is a bottom performer, Staff recommends that SDG&E improve the Capacity Bidding Program by including a weather variable in the forecast model for the program. Staff explains that the Capacity Bidding Program performed with mixed results in 2012, with differences between the daily forecast and the ex-post ranging from -32 percent to 12 percent for the day-ahead program and -27 percent to 6 percent for the day-of program.³² Staff surmises that because the forecast models for the day-ahead or day-of programs do not include a variable that accounts for weather, and the ex-post models do include such a variable, the lack of the variable could explain the differences between the outcomes of each model. Staff concludes that the addition of a weather variable could increase the accuracy of the model.

SDG&E contends that adding additional variables to the Capacity Bidding Program forecasting model will not improve the daily forecast. SDG&E explains that the 2012 ex-post results for this program are not clearly weather related and any adjustments for weather could systematically over-estimate the load reduction. SDG&E points to the first three program events where the day-ahead forecast was the same for each event and the forecast was accurate with the ex-post results. While we agree with SDG&E that there does not seem to be a

³² May Report at Table 3.

correlation between temperature and forecasting, we find that the forecasting model for the Capacity Bidding Program is not sufficiently accurate. We add this to the list of forecasting models that DRMEC should address in its review and include in its December 1, 2013 report to the Commission.

6.3. Communicating the New Features of SCE's AC Cycling Program for Commercial Customers

SCE is presently implementing several changes to its AC Cycling program for Commercial customers, called the Summer Discount Plan. These changes include the movement to an economic-based year-round program.³³ Because of the multiple program changes, Staff recommends that SCE manage its AC Cycling marketing program so that the changes to the program are clearly communicated to avoid customer dissatisfaction and potential participation decline. We agree that SCE should educate commercial customers on the changes to its AC Cycling program but we also recognize that SCE is already taking steps to address the Staff concerns. Staff should monitor to ensure that the steps taken are sufficiently successful.

Staff analyzed the results of the SCE AC Cycling customer survey performed in December 2012. According to Staff, the results of the survey indicate that commercial customers who are most familiar with the program have the greatest satisfaction with the program.³⁴ Familiarity with the program includes knowledge of discounts, events, and expected savings. The customer survey also indicates that the level of familiarity is boosted by communications

³³ The Commission approved these changes in D.13-04-017.

³⁴ May Report at 59.

from SCE, including written materials.³⁵ Staff surmises that clear communication of the program leads to improved customer knowledge and increased customer satisfaction.³⁶

Noting the plethora of changes being introduced to the Summer Discount Plan AC Cycling program in 2013 (as described in Table 4), Staff cautions that customer confusion may be a problem. Staff recommends that SCE develop a clear education program to communicate these changes in order to avoid customer confusion, dissatisfaction, and the potential decrease in participation.

TABLE 4³⁷ SCE SUMMER DISCOUNT PLAN AC CYCLING COMMERCIAL PROGRAM 2013 CHANGES		
Program Element	Current Design	Approved Design
Event Trigger	Emergency Only	Emergency and Economic
Program Availability	June 1 through September 30	Year-Round
Event Duration	Six hours	Multiple events may occur in a single day, with varying durations, but with a maximum of six hours in the day.
Cycling Options	30%, 40%, 50%, and 100%	30%, 50%, and 100%

³⁵ *Id.* at 61.

³⁶ *Id.* at 62.

³⁷ May Report at Table 35.

DRA agrees with the recommendation by staff that careful management of the marketing program is necessary to inform customers of the changes and avoid customer dissatisfaction and potential dropouts. DRA also cautions SCE to be aware of any rebound effect if employing a similar dispatch strategy as seen in the residential program (discussed in section 6.7 of this decision).³⁸

SCE acknowledges that some customers may not be fully informed on the program characteristics and is committed to ensuring customers are aware of the changes during the program transition. SCE provides several examples of its efforts to ensure customer education. At this time, we are satisfied that SCE is taking steps to avoid customer confusion or dissatisfaction with the program. Because of the concern for potential customer confusion, we direct staff to monitor program results to ensure that the education program is sufficiently successful. As SCE is aware, staff may ask for additional data on the education program so that it may properly monitor its impact on the Commercial Summer Discount Plan. SCE is encouraged to work cooperatively with staff so that the education program is sufficiently successful.

6.4. Auto DR Load Impacts

Auto Demand Response (also referred to as Auto DR or ADR) is a technology program that allows a customer's equipment or facilities to reduce demand automatically in response to a Demand Response event or price signal without the customer taking individual action.³⁹ Staff concludes that there is limited data on the effectiveness of Auto DR. The limitations may be due to a

³⁸ DRA Comments at 20.

³⁹ D.12-04-045 at 138.

small sample size. With further growth in Auto DR resulting from the increase in the number of incentives available for customers,⁴⁰ Staff recommends that the utilities perform studies to determine the benefits of Auto DR, especially the load impacts. Because a process and impact evaluation for Auto DR is scheduled for 2013, we wait for the outcome of that evaluation to determine if further studies are necessary.

In the May Report, Staff references D.12-04-045 which states that “limited data suggests that ADR customers have a higher participation rate in [Demand Response] programs and provide better load shed.”⁴¹ In its analysis of 2012 program data, Staff did not have a breakdown of Demand Response programs by those customers who participate in Auto DR. Upon review of two external studies,⁴² Staff surmises that while one study shows that customers on Auto DR and Critical Peak Pricing provide a greater load reduction than customers on the Critical Peak Pricing rate alone,⁴³ the other study concluded that few of the top performers use technology to automate their response.⁴⁴ Staff cautions that both of these studies used a small sample size and thus should be interpreted with caution. Staff suggests that with the increased incentives made

⁴⁰ The Commission approved \$4.2 million in additional incentives for 2013 and 2014 in D.13-04-017.

⁴¹ May Report at 63 quoting D.12-04-045 at 138.

⁴² 2011 California Statewide Non-Residential Critical Peak Pricing Evaluation and California Statewide Critical Peak Pricing Research on Improving Customer Response, December 3, 2012.

⁴³ 2011 California Statewide Non-Residential Critical Peak Pricing Evaluation, at 41.

⁴⁴ California Statewide Critical Peak Pricing Research on Improving Customer Response, December 3, 2012.

available to its Auto DR program, SCE should have a larger participant pool to collect data. Staff thus recommends that the Commission approve studies to better determine the benefits of Auto DR, especially the load impact attributable to Auto DR.

DRA and SCE agree that more research is needed to determine the impacts from Auto DR.⁴⁵ SCE points out that the DRMEC is conducting a process and impact evaluation of Auto DR in 2013. SCE suggests that the results of the report will help to inform program design.⁴⁶

The Commission should determine the benefits and load impacts of Auto DR. However, because a process and impact evaluation of Auto DR is scheduled for 2013, we wait for the results of that evaluation before authorizing further studies. Should they find the evaluation to be inefficient, Staff may recommend further studies in the upcoming Demand Response Rulemaking.

6.5. Demand Response Program for the Navy

In the May Report, Staff states that changes in the SDG&E Demand Bidding Program for 2013 and 2014 would not allow the United States Navy to participate in the program. Staff recommends that SDG&E and the Navy work collaboratively to develop a Navy-only Demand Bidding Program that addresses the Navy's barriers to participating in the program as currently designed. In D.13-04-017, the Commission encouraged SDG&E to work collaboratively with the Navy and we continue to do so here.

⁴⁵ SCE Comments at 11 and DRA Comments at 21.

⁴⁶ SCE Comments at 12.

Staff explains that, according to the Navy, SCE's Demand Bidding Program and the modification of the program from a day-ahead to a 30-minute day-of program eliminates any potential participation from the Navy. Despite this, both SDG&E and the Navy are willing to work together to develop a program to meet the unique needs of the Navy. Staff specifies three issues raised by the Navy and recommends that SDG&E and the Navy collaboratively work to develop the Navy-only program to address these issues. However, the Staff report did not provide any data that justifies focusing on these three issues. Thus, we do not adopt any specific requirements for a Navy-only program. SDG&E acknowledges that it appears to be close to finalizing a program proposal with the Navy. We encourage SDG&E to finalize the proposal so that the program can be implemented for the remainder of the Summer 2013 season. We direct SDG&E to submit the proposal to the Commission via a Tier Two Advice Letter for Commission review.

6.6. PTR Program: Default versus Optional Participation

PTR consumer surveys indicate that PTR customers choosing to receive utility event alerts result experienced increased awareness of the program and also provided increased load reduction. In contrast, 2012 program results also show that customers on MyAccount⁴⁷ who are defaulted to receive notifications did not significantly reduce load. Staff points out that all customers qualify for

⁴⁷ MyAccount is the online service where customers can access all their utility-related accounts and view billing, payment, and usage history amongst other information. The service is password protected and customers must sign in to access their information. (<https://www.sce.com/SC3/CustomerService/about-account.htm>) and (<http://www.sdge.com/my-account-terms-and-conditions>).

the bill credits, resulting in a situation of “free-ridership.” Staff recommends modifying the PTR program from a default program to an optional program, where only customers who choose to receive event alerts qualify for bill credits. We agree with the Staff recommendation and direct both utilities to implement the change from a default to an optional program for the 2014 season.

PTR, as currently approved, provides an incentive of \$0.75 per kilowatt-hour (kWh) reduced during PTR events, with an additional \$0.50 per kWh for customers with enabling technology.⁴⁸ For both utilities, customers with Smart Meters are automatically enrolled into this rate structure. Customers enrolled in MyAccount are currently defaulted to receive email notifications of events. All customers are also given the option to receive event alerts.

Upon review of 2012 ex-post PTR load impact data, Staff concludes that, in the case of both SCE and SDG&E, customers who actively opted to receive event alerts significantly decreased their load during events while those who were defaulted to receive email event notifications provided an insignificant load impact. SDG&E’s customers not receiving any event alerts also provided an insignificant load impact. Moreover, SCE did not collect ex-post data load impact data for customers not receiving any alerts. Staff interprets this to mean that SCE customers not receiving event alerts provided no significant load impact. Table 1 below provides a comparison of the ex-post load impacts for each class of customer for each utility.

⁴⁸ SCE and SDG&E’s PTR programs provide the same level of incentive for usage as calculated over a similar period of time. The incentives are provided to customers as bill credits.

TABLE 1						
2012 Ex-Post PTR Load Impacts for SCE and SDG&E by Customer Group (MW)⁴⁹						
Event⁵⁰	SDG&E Customers who opted to receive event alerts	SDG&E Customers on MyAccount defaulted to receive email event alerts	SDG&E Customers not notified directly of events	SCE Customers who opted to receive event alerts	SCE Customers on MyAccount defaulted to receive email event alerts⁵¹	SCE Customers not notified directly of events
1	6.1	0	0	n/a	n/a	n/a
2	3.2	0	0	39.6	56.25	n/a
3	3.1	0	0	11.17	13.25	n/a
4	1.7	0	0	21.22	0.71	n/a
5	1.1	0	0	6.37	-6.35	n/a
6	3	0	0	0.17	-23.28	n/a
7	8.2	0	0	6.04	-4.39	n/a

Furthermore, Staff claims that in the case of SCE, 95 percent of all incentives were paid to customers who either were not expected to or did not reduce load significantly. Similarly, in the case of SDG&E 94 percent of PTR incentives were paid to customers who did not choose to receive notification of event alerts. Staff contends that this is a case of free ridership, where customers receive incentives without significantly reducing load. Staff argues that

⁴⁹ May Report at Tables 21 and 26.

⁵⁰ Each utility had seven PTR events in 2012. SDG&E had events on July 20, August 9, 10, 11, 14, and 21, and September 15. SCE had events on July 12, August 10, 16, 29, and 31, and September 7 and 10.

⁵¹ Negative numbers denote an increase in MW usage by customers.

incentives should reward and encourage customer participation. Thus Staff recommends that the PTR program be revised to a program that eliminates incentives to customers not actively participating in the program. Staff recommends the incentive structure shown in Table 2.

TABLE 2 STAFF RECOMMENDED REVISED PTR INCENTIVE STRUCTURE	
PTR Customer Group	Incentive (\$/kWh)
Opt-in to Receive Event Notification	\$0.75
Opt-in to Receive Event Notification and Enabling Technology	\$1.25
Other Customers	\$0

SDG&E supports the revision of PTR from a default program to an optional program. However, SDG&E explains that an initial evaluation following the 2012 season indicated that implementing the change for the 2013 season was not possible due to extensive system changes.⁵² Similarly, SCE also points to similar billing system changes as a barrier to changing the program during the 2013 season. However, SCE contends that the program was newly launched in 2012 and should not be discounted. Furthermore, SCE claims that the settling parties of its General Rate Case Phase 2 Residential Rate Settlement agreed that SCE would not make any program design changes in the short term.⁵³

⁵² SDG&E Comments at IV.

⁵³ SCE Comments at 9.

The results of 2012 program data indicate that only actively participating customers produce substantive load impacts. Based on this information, we find that the program should be revised from a default program to one where the customer must choose to participate. Such a revision would improve the usefulness of PTR by making it more reliable, which also meets one of the guiding principles of November 2012 Energy Division Letter. Finally, the revision is based on 2012 PTR results.

SCE claims that a prior agreement limits its ability to make PTR program changes. We note that D.11-06-007 provides that the Commission can authorize modifications to program design without the settling parties' agreement.⁵⁴ However, we understand the difficulty with revising this program in time for the 2013 season. Furthermore, both SDG&E and SCE provided additional rationale for delaying this modification until the beginning of the 2014 Summer season.⁵⁵ Thus, we direct SCE and SDG&E to revise the program to be an optional program no later than May 1, 2014. In addition, SCE and SDG&E shall file Tier One Advice Letters no later than February 1, 2014 making the required changes in their respective PTR tariffs.

In addition to the PTR program revisions, Staff suggests several recommendations associated with enabling technology and one recommendation regarding customer fatigue. First, Staff recommends that SCE and SDG&E encourage customers to adopt enabling technologies. Second, Staff recommends that the utilities explore alternatives to service delivery of enabling technologies,

⁵⁴ D.11-06-007 at 6-7.

⁵⁵ SDG&E comments on the proposed decision, July 1, 2014 at 3 and SCE comments on the proposed decision, July 1, 2014 at 4.

such as the use of third party providers. Third, Staff recommends that the utilities track data regarding the enabling technology. Finally, Commission Staff recommends that SDG&E and SCE investigate evidence of customer fatigue and its impact on program design and dispatch.

No party opposed staff's recommendations regarding enabling technologies. Although SCE notes that DRMEC is currently conducting a process and impact evaluation of Auto DR in 2013.⁵⁶ Furthermore, SDG&E describes two requests for proposals on enabling technologies it is currently authorized to implement.⁵⁷

The Commission has encouraged the utilities implementing Demand Response programs to utilize enabling technology with the caveat that the research and development undertaken is understood by this Commission. In D.12-04-045, we required semi-annual reports on Emerging Technology projects. In addition, we require that SDG&E and SCE track as part of the ex-post results, whether the presence of enabling technologies improves load reduction. Within 30 days from the issuance of this decision, SDG&E and SCE should consult with staff regarding the specific data that shall be collected in order to better understand the impact of enabling technologies.

Lastly, we address the issue of customer fatigue. Following the 2012 season, SDG&E conducted three post-event PTR surveys. SDG&E claims that it is difficult to determine from the surveys whether customer fatigue is an issue. Staff points out a single instance in 2012 where when SDG&E's PTR was called

⁵⁶ SCE Comments at 12.

⁵⁷ SDG&E Comments at V.

three consecutive days in August the load impact was lowest on the third day.⁵⁸ Thus, staff recommends that both utilities should “look to investigate if customer fatigue is an issue.”⁵⁹ We find no substantive evidence of customer fatigue in PTR for either utility. However, given the potential for increasing PTR events due to the outage of SONGS, we want to ensure that customer fatigue does not become a problem. We direct SDG&E and SCE to investigate, as part of the Demand Response program process evaluation, any evidence of PTR customer fatigue and its impact on program design and dispatch.

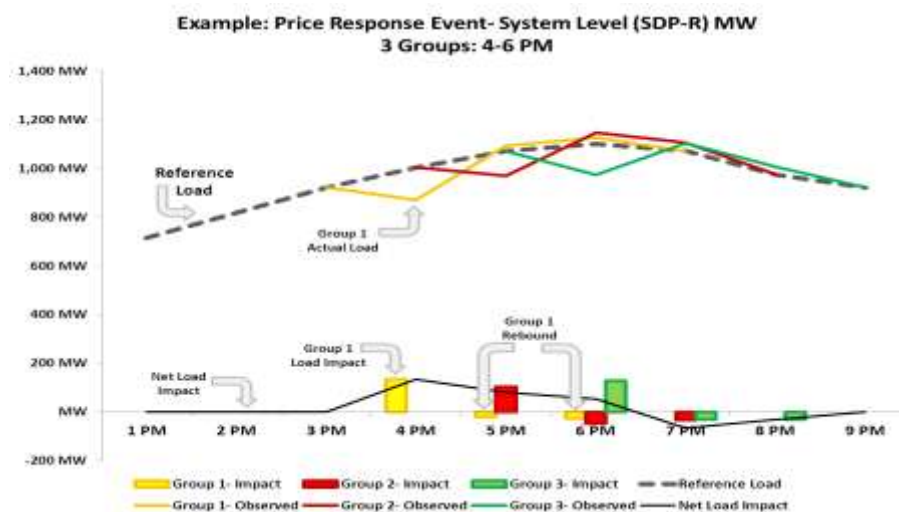
6.7. SCE’s AC Cycling Residential Program Improvements

In 2012, SCE’s AC Cycling Residential Program, also known as the Summer Discount Plan underwent several changes. Despite these changes, customer survey results indicate general satisfaction with the program. However, upon review of the load impacts of the program, Staff discovered that the strategy used by SCE to deploy the program created a rebound effect that dampened the average hourly load impact for the entire event period. Staff recommends that SCE revise the design of the program to include an additional level of incentive for customers willing to cycle their unit for the entire event duration as described below. SCE’s dispatch strategy for its Residential Summer Discount Plan negates any positive results for this program. We direct SCE to implement further testing of its dispatch strategy, as described below, to reduce the rebound effect.

⁵⁸ May Report at 45-46.

⁵⁹ May Report at 50.

With the 2012 change from an emergency only to an emergency and economic triggered program, SCE anticipated triggering the Summer Discount Plan more often. In order to limit customer fatigue, SCE devised a segmented deployment of the program during events whereby the entire program population was divided into three customer groups with each group triggered for only a portion of the event. SCE surmised that customers would be minimally impacted by the loss of a few hours of AC services, compared to multiple continuous hours. However, the implementation of the strategy resulted in a rebound effect where those customers curtailed during the early event hours added load to the system during the later hours because the customers' AC units operated at above-normal capacity in order to return the customers' environment to the original temperature. As a result, the average hourly load impact decreased for the entire event. The following figure depicts this situation.

FIGURE 160

In order to reduce this rebound effect, Staff recommends that incentives for the Residential Summer Discount Plan be revised to include higher incentives for customers willing to cycle their AC unit for the entire event duration.

Additionally, SCE should explore alternative ways of delivering the program, such as using a Programmable Control Thermostat instead of an on-off switch. This would allow customers to participate for longer event durations while maintaining a more comfortable temperature.

SCE does not oppose the recommendation to revise its dispatch strategy. SCE notes that it continues to evaluate its dispatch strategy. However, it notes that Staff recommendations of higher incentives for customers willing to participate in longer events are already implemented with the 50 percent cycling option and the event override switch.⁶¹

We acknowledge the concern by SCE to eliminate customer fatigue. However, the staff analysis indicates no reported evidence customer fatigue, but instead, has discovered the severity of the rebound effect and its load impact. While SCE states it is implementing a 50 percent cycling option and an event override switch in order to provide incentives to customers willing to participate in longer events, the dispatch strategy limits this customer group to one hour events thus negating the full potential of these options.

⁶⁰ May Report at 29, Figure 1 referencing SCE April 11, 2013 Power Point Presentation on 2012 Residential Summer Discount Program Ex-Post vs. Ex Ante Briefing.

⁶¹ SCE Comments at 10.

In comments to the proposed decision, SCE recommended that the Commission allow further testing of SCE's dispatch strategy explaining that such further testing will allow for alternate strategies including those that can integrate with the CAISO markets. SCE also requests that the results of the testing be included in the end of year report to be provided by the DRMEC. Both DRA and CAISO agree with this request.⁶² We agree that further testing may lead to alternate dispatch strategies and thus find it reasonable to allow continued testing of a revised dispatch strategy that reduces the rebound effect. However, we find that staff should be timely apprised of the outcomes of the testing and thus require SCE to file an end of Summer report on the continued testing of its AC Cycling dispatch strategy via a Tier One Advice Letter.

We therefore direct SCE to continue testing the dispatch strategy to reduce the rebound effect such that the strategy optimizes the resource. SCE shall provide a report to Commission staff via a Tier One Advice Letter at the end of the Summer 2013 season but no later than December 15, 2013. Should the December 15, 2013 report show insufficient improvement in the rebound effect, SCE is directed to work with Commission Staff to ensure the improvements for the 2014 season.

6.8. Daily and Weekly Demand Response Reports

Developed in 2012, Staff considers the utilities' weekly and daily Demand Response reports to be a valuable solution in making the Demand Response resources visible to the CAISO in lieu of direct integration into the CAISO wholesale energy market. As such, Staff recommends that, during 2013 and

⁶² CAISO Reply Comments to the Proposed Decision, July 8, 2013 at 2 and DRA Reply Comments to the Proposed Decision, July 8, 2013 at 2-3.

2014, the utilities should continue the Demand Response Reporting requirements, as outlined in the May Report.⁶³ We agree with the Staff recommendation and require SCE and SDG&E to continue the reporting.

Staff describes the general steps taken to mitigate the potential affects from the SONGS outage and ensure system reliability throughout the summer of 2012, including the development of a mechanism to inform the CAISO of the amount of day-ahead and day-of Demand Response capacity available on a daily and hourly basis. Because Demand Response is not integrated in the CAISO's wholesale energy market, the CAISO is blind to how much Demand Response capacity exists in the system. Thus, the utilities, the CAISO and the Commission worked collaboratively to develop Daily and Weekly Demand Response reports which the utilities submitted from June 1, 2012 to October 31, 2012. In Application (A.) 12-12-016, SCE proposed to eliminate both the daily and weekly reporting requirements claiming they provided no value to the utility. In comments to the Application, the CAISO disagreed with SCE contending the purpose of the reports was to provide value to the CAISO who did find value. CAISO claimed that the reports provided information such that it is no longer blind to how much Demand Response capacity exists in the system.⁶⁴ Staff agrees that the reports provide value both to the CAISO and to the Commission.

No party opposed this recommendation. Because the CAISO and Staff found the reports valuable, we direct SCE and SDG&E to continue the daily and weekly reporting requirements to the Commission and the CAISO.

⁶³ May Report at Appendix R.

⁶⁴ CAISO's comments to the Application, January 18, 2013.

7. Comments on Proposed Decision

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed by the CAISO, DRA, SDG&E, and SCE on July 1, 2013, and reply comments were filed on July 8, 2013 by the CAISO, DRA, and SCE. Revisions have been made throughout the decision as appropriate in response to the comments received.

We note that, in comments, DRA recommended the Commission apply the relevant lessons learned in the May Report to Pacific Gas and Electric Company, the third Demand Response program provider. We decline to adopt this recommendation as that would be outside of the scope of this proceeding and could violate due process rights.

8. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Kelly A. Hymes is the assigned ALJ in this proceeding.

Findings of Fact

1. The scope of this proceeding includes program revisions to improve the use and reliability of Demand Response programs for 2013 and 2014.
2. As part of improving Demand Response programs, the Commission should know whether Demand Response programs are being used less than peaker plants and why.
3. There is insufficient evidence in the record of this proceeding to make any determination regarding the use of peaker plants in comparison with Demand Response programs.

4. The Commission is concerned with the variance between the daily forecasts and the ex-post results for Demand Response programs, as described in the May Report.

5. Successful Demand Response programs require transparent, consistent, and accurate daily forecasting.

6. The daily forecasting reports were developed with no prior standards or processes.

7. The use of stakeholders to revise the daily forecasting methodology meets the requirements of this proceeding in that it will improve the usefulness or availability of Demand Response for 2013 and/or 2014; it complies with the guiding principles of increasing program reliability; and it relies on lessons learned from the 2012 Demand Response program results.

8. The May Report indicates that the daily forecasting for SCE's AC Cycling program needs improvements.

9. A pilot for improving SCE's AC Cycling program may not be implemented in time for the summer of 2013.

10. Ex-post results for the Critical Peak Pricing consistently outperformed the daily forecast predictions.

11. Staff did not provide an explanation of how or why a test event will improve daily forecast estimates for Critical Peak Pricing.

12. The forecasting model for SDG&E's Capacity Bidding Program is not sufficiently accurate.

13. There is not enough evidence to deduce any correlation between temperature and forecasting in the case of SCE's Capacity Bidding Program.

14. SCE is implementing several changes to its Commercial AC Cycling program.

15. The multiple changes to the Commercial AC Cycling program could lead to customer dissatisfaction and potential participation decline without the proper customer education.

16. SCE is currently taking steps to ensure that customers are aware of the changes.

17. DRMEC is conducting a process and impact evaluation of Auto DR in 2013.

18. The results of the Auto DR evaluation may inform future program design.

19. SDG&E's Demand Bidding program and its modification to a 30-minute program eliminates any potential participation from the Navy.

20. SDG&E and the Navy are willing to work together to develop a program to meet the unique needs of the Navy.

21. The May Report provides three issues for SDG&E and the Navy to collaborate on but provides no justification for these issues.

22. SDG&E claims that it and the Navy are close to finalizing a program proposal.

23. Demand Response data from 2012 indicates that only actively participating customers produce substantive load impacts.

24. For both SCE and SDG&E, statistics show that most incentives paid for the PTR program were paid to customers who either were not expected to or did not reduce load significantly.

25. SDG&E claims that implementing a PTR program change from a default program to an optional program prior to May 2014 is not possible due to extensive system changes.

26. SCE claims that a billing system change is a barrier to revising the PTR program from a default program to an optional program prior to May 2014.

27. Revising PTR from a default program to an optional program improves the usefulness of PTR by making it more reliable, which also meets one of the guiding principles of the November 2012 Energy Division Letter.

28. The Commission has encouraged the utilities implementing Demand Response programs to utilize enabling technology, with the caveat that the research and development undertaken is understood by the Commission.

29. D.12-04-045 required semi-annual reports on Emerging Technology projects.

30. Staff recommended higher incentives for SCE's AC Cycling residential customers willing to participate in longer events are already implemented with the 50 percent cycling option and the event override switch.

31. The May Report found no evidence of customer fatigue for SCE's Residential AC Cycling program.

32. Further testing of SCE's AC Cycling dispatch strategy may allow for alternate strategies including those that can integrate into the CAISO market.

33. Staff should be timely apprised of the dispatch strategy testing outcomes.

34. Staff considers the utilities' weekly and daily Demand Response reports to be a valuable solution in making the Demand Response resources visible to the CAISO in lieu of direct integration into the CAISO wholesale energy market.

35. CAISO claims that the daily and weekly Demand Response reports provided information to allow CAISO to see how much Demand Response capacity exists in the system.

36. No party opposed the staff recommendation to continue submitting the daily and weekly Demand Response reports to the Commission and the CAISO.

Conclusions of Law

1. The Commission should study if, to what extent, and why utilities are using peaker plants at a much higher rate than Demand Response programs.
2. The Commission should not hastily revise forecasting methodologies for 2013.
3. The Commission should include thoughtful stakeholder input into the improvement of the demand response program forecasting methodology.
4. DRMEC should review the daily forecasting methodologies for all Demand Response programs to determine improvements.
5. The Commission should determine the benefits and load impacts of Auto DR.
6. Both the SCE and SDG&E PTR programs should be revised from a default program to an optional program to decrease free ridership.
7. Research and development for enabling technologies that are undertaken by the utilities should be comprehended by the Commission.
8. Testing of SCE's dispatch strategy for the Residential AC Cycling program should be studied to reduce the rebound effect such that the strategy optimizes the resource.
9. SCE should report to the Commission at the end of Summer 2013 season the results of its AC Cycling dispatch strategy testing.
10. SCE and SDG&E should submit daily and weekly reports to the Commission and the CAISO.
11. A.12-12-016 and A.12-12-017 should be closed.

O R D E R**IT IS ORDERED** that:

1. The new Rulemaking on Demand Response programs will consider the issue of whether, to what extent, and why utilities are using peaker plants at a higher rate than Demand Response programs.

2. The Demand Response Measurement and Evaluation Committee (Committee) shall meet 15 days from the issuance of this decision with the California Independent System Operator and Commission Staff to begin to address the forecasting methodology issues discussed in the May 1, 2012 Staff Report, Lessons Learned from Summer 2012 Southern California Utilities' Demand Response Programs. The Committee's review shall include an analysis of how actual demand response program operations impact the input assumptions for ex-ante forecasts.

3. The Demand Response Measurement and Evaluation Committee shall develop one or more revised daily forecasting methodologies to be piloted during the Summer 2013 season, but launched no later than September 1, 2013. We provide flexibility to the group to determine if piloting one methodology is sufficient or if more is needed.

4. As representatives of the Demand Response Measurement Evaluation Committee, San Diego Gas & Electric Company, and Southern California Edison Company shall submit a report by January 31, 2014 to the Commission and parties to this proceeding via a Tier One Advice letter. The report shall detail the forecasting methodologies pursued, the results, and recommendations for daily forecasting for 2014 and beyond.

5. The Demand Response Measurement and Evaluation Committee shall review the forecasting models for Southern California Edison Company's Air Conditioning Cycling and Peak Time Rebate programs and San Diego Gas & Electric Company's Capacity Bidding programs as part of its overall review of the forecasting methodologies and include its analysis and recommendations in the January 31, 2014 report to the Commission.

6. San Diego Gas & Electric Company shall submit its proposal for a new Demand Response program developed with the United States Navy. The proposal shall be submitted via a Tier Two Advice Letter such that the program can be implemented during the Summer 2013 season.

7. San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (SCE) shall revise their Peak Time Rebate programs from default programs to programs that can be chosen by a residential customer. SDG&E and SCE shall complete the revisions no later than May 1, 2014.

8. San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (SCE) shall file Tier One Advice Letters revising their Peak Time Rebate program tariffs appropriately to indicate the revision from default programs to programs that can be chosen by a residential customer. SDG&E and SCE shall file the Tier One Advice Letters no later than February 1, 2014.

9. Within 30 days from the issuance of this decision, San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company (SCE) shall consult with staff to determine the specific data that should be collected in order to better understand the impact of enabling technologies. SDG&E and SCE shall track the new data in order to determine whether the presence of enabling technologies improves load reduction.

10. San Diego Gas & Electric Company and Southern California Edison Company shall investigate as part of their annual Demand Response program process evaluation, any evidence of Peak Time Rebate customer fatigue and its impact on program design and dispatch.

11. Southern California Edison Company (SCE) shall continue to test dispatch strategies for the Residential Air Conditioner Cycling program to reduce the rebound effect. SCE shall report its testing results to staff via a Tier One Advice Letter at the end of the Summer 2013 season but no later than December 15, 2013.

12. Should the required December 15, 2013 report indicate insufficient improvement in the rebound effect, Southern California Edison shall work with Commission Staff to ensure sufficient improvements for the Summer 2014 Demand Response season.

13. San Diego Gas & Electric Company and Southern California Edison Company shall continue submitting daily and weekly Demand Response reports to the Commission and to the California Independent Systems Operator.

14. Proceedings Application (A.) 12-12-016 and A.12-12-017 are closed.

This order is effective today.

Dated _____, at San Francisco, California.